

REMARKS/ARGUMENTS

I. Summary

Claims 1-5, 8 and 19-20 have been amended. The amendments to the claims are fully supported by the original disclosure. No new matter has been introduced. Claims 9-18 were previously withdrawn from consideration. Claims 1-8 and 19-23 are currently pending.

II. Claim Objections

Claims 19-23 were objected to because the Examiner stated that the terms of “an electronic substrate” and “a substrate” in independent claim 19 were misleading. Applicants respectfully disagree with this characterization as “an electronic substrate” and “a substrate” are two distinct elements; subsequent references to the two distinct elements would be clearly specified as “the electronic substrate” and “the substrate,” respectively. Further, claim 1 includes “an electronic substrate” and “a substrate,” and the Examiner clearly interpreted these elements as two distinct elements without objection. Withdrawal of the Examiner’s objection is respectfully requested.

III. Claim Rejections under 35 U.S.C. §102

In the subject Office Action, claims 1-6 were rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe.

Applicants have amended claim 1, incorporating in substance the following limitation:

“one or more interconnect cavities extending into, but not through, the substrate, *each exposing two or more of the two or more electrically conductive inner layers.*”
(emphasis added)

In contrast, Watanabe discloses a via for electrically connecting a first wiring layer formed *on a first surface* with another wiring layer inside an insulating layer. Watanabe does not teach one or more interconnect cavities extending into, but not through, the substrate, *each exposing two or more of the two or more electrically*

conductive inner layers. Accordingly, as Watanabe fails to teach at least one required limitation of claim 1, claim 1 is patentable over Watanabe.

Claims 2-6 depend from claim 1, incorporating its limitations. As claim 1 is patentable over Watanabe, claims 2-6 are also patentable over Watanabe by virtue of at least their dependency on claim 1.

In the subject Office Action, claims 1-8 and 19-23 were rejected under 35 U.S.C. 102(e) as being anticipated by Ho, et al. ("Ho").

As stated above, Applicants have amended claim 1, incorporating in substance the following limitation:

"one or more interconnect cavities extending into, but not through, the substrate, each exposing two or more of the two or more electrically conductive inner layers."
(emphasis added)

In contrast, Ho discloses bumps attached to bump pads, the bump pads attached to a first metal layer. Ho does not teach one or more interconnect cavities extending into, but not through, the substrate, each exposing two or more of the two or more electrically conductive inner layers. Accordingly, as Ho fails to teach at least one required limitation of claim 1, claim 1 is patentable over Ho.

Claims 2-8 depend from claim 1, incorporating its limitations. As claim 1 is patentable over Ho, claims 2-8 are also patentable over Ho by virtue of at least their dependency on claim 1.

Claim 19 includes, in substance, the same limitations of claim 1. As claim 1 is patentable over Ho, claim 19 is also patentable over Ho for at least the same reasons.

Claims 20-23 depend from claim 19, incorporating its limitations. As claim 19 is patentable over Ho, claims 20-23 are also patentable over Ho by virtue of at least their dependency on claim 19.

IV. Conclusion

Applicants submit claims 1-8 and 19-23 are in condition of allowance. The Examiner is invited to call the undersigned at (503) 796-2904 regarding any inquiry concerning this communication. Issuance of the Notice of Allowance is respectfully requested.

The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 500393.

Respectfully submitted,
SCHWABE, WILLIAMSON & WYATT, P.C.

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